# 510(K) SUMMARY

PEP 19 2012

This summary of 510(k) safety and effectiveness information is being submitted in accordance with the requirements of 21 CFR 807.92.

The Assigned 510(k) number is: K121224

## 1. Submitter's Identification:

TaiDoc Technology Corporation
3F, 5F, No.127, Wugong 2<sup>nd</sup> Rd., Wugu District, New Taipei City, 24888, Taiwan

## Correspondent:

Linda Ko

Regulatory Affairs Specialist

Tel: +886-2-6625-8188 #1158

Fax: +886-2-6625-0288

Email: kolinda@taidoc.com.tw

Prepared date: April 20th, 2012

### 2. Device name:

Proprietary name: Genesis Health Technologies Blood Glucose Monitoring System,

model TD-4123

Genesis Health Technologies control solutions

## Regulatory information:

A. Regulation section: 21 CFR 862.1345 Glucose Test System

21 CFR 862.1660 Quality control material (assayed and

unassayed).

B. Classification:

Class II, Class I

C. Product Code:

LFR, Glucose Dehydrogenase, Glucose

NBW, System, Test, Blood Glucose, Over the Counter JJX, single (specified) analyte controls (assayed and

unassayed)

D. Panel:

Clinical Chemistry (75)

#### 3. Intended Use:

### For single use device

The Genesis Health Technologies Blood Glucose Monitoring System is intended to be used for the quantitative measurement of glucose in fresh capillary whole blood (from the finger, palm, forearm and upper arm). It is intended for use by people with diabetes at home as an aid to monitoring the effectiveness of diabetes control. It should not be used for the diagnosis of or screening for diabetes, or testing on neonates.

This system is intended to be used by a single person and should not be shared.

The Genesis Health Technologies test strips are for use with the Genesis Health Technologies meter to quantitatively measure glucose (sugar) in fresh capillary whole blood samples drawn from fingertips, palm, forearm and upper arm.

Alternative site testing should be done only during steady-state times (when glucose is not changing rapidly).

The Genesis Health Technologies control solutions are for use with the Genesis Health Blood Glucose meter and test strips to check that the meter and test strips are working together properly and that the test is performing correctly.

## 4. Device Description:

The system consists of three main products: the meter, test strips, and control solutions. These products have been designed, tested, and proven to work together as a system to produce accurate blood glucose test results.

#### 5. Substantial Equivalence Information:

- A. Predicate device name: U-RIGHT TD-4252 Blood Glucose Monitoring System, model TD-4252
- B. Predicate K number: K101631
- C. Comparison with predicate:

The modified Genesis Health Technologies Blood Glucose Monitoring System has the following similarities to the predicate device:

- Same operating principle.
- Same fundamental scientific technology.
- Incorporate the same basic circuit design.
- Incorporate the same materials.

- Same shelf life.
- Packaged using the same materials.
- Manufactured by the same process.

# The modifications encompass:

- Modifications in the physical appearance
- Software modifications of the glucose meter
- Rechargeable Li-polymer battery instead of CR2032 battery
- Labeling change due to the above modifications

E. Similarities and Differences between predicate and proposed device

Item	Predicate device	Proposed device	
Brand name	U-RIGHT TD-4252 Blood	Genesis Health	
	Glucose Monitoring System	Technologies Blood Glucose	
	(k101631)	Monitoring System	
Model no	TD-4252	TD-4123	
	Similarities		
Intended use	It is intended to be used for	Same as predicate	
	quantitative measurement of		
	glucose in fresh capillary whole		
	blood (from the finger, palm,		
	forearm and upper-arm) as an aid		
	to monitoring the effectiveness of		
	diabetes control.		
<b>Detection mecl</b>	hanism		
Operating	Electrochemical Biosensor	Same as predicate	
principle	technology		
Detection	Amperometry:		
method	measuring a current produced by a	Same as predicate	
	chemical reaction		
Specifications			
Temperature	Automatic compensation with	Same as predicate	
compensation	built-in thermister		
Sample	0.7 μL	Same as predicate	

volume (μL)				
Reaction time	7	Same as predicate		
(sec)	,			
Measurement	20-600 mg/dL	Same as predicate		
range Meter Storage/				
Transportation	-4 to 140□ (-20□~ 60□),	Same as predicate		
condition	<95% R.H.			
Strip Ejection	Yes	Same as predicate		
Functions				
Power saving	Auto turn-off after 3 minutes without action	Same as predicate		
Calibration	No coding required	Same as predicate		
Alarm	4 settings	Sama as mudicate		
Function	4 settings	Same as predicate		
Memory	450 measurements with day and	Same as predicate		
feature	time	Same as predicate		
Test Strip				
Enzyme	Glucose dehydrogenase	Same as predicate		
Detection	Amperometry: measuring a			
method	current produced by a chemical	Same as predicate		
memou	reaction			
Blood Volume	0.7 μL	Same as predicate		
Reaction time	7 Sec	Same as predicate		
Strip Storage/	35.6°F and 89.6°F (2 ° C and 32°	Same as predicate		
Transportation	C), below 85% R.H.	Same as production		
condition	0,, 00.0			
Differences				
Power source :	One CR2032 battery	1x 3.7V Li-polymer battery		
Battery		With the battery recharging		
recharging	No	function through USB		
function				
Measurement	mg/dL or mmol/L	mg/dL		
unit				

Test strip indication light	No	Yes
Backlight	No	Yes
Special message	There is a "Ketone?" indicator that shows on the display	No ketone warning symbol provided
Measurement mode	General and QC (quality control)	General, AC, PC and QC (quality control)
QC test stored	No QC results are stored in	Yes (User can review QC test in
in memory	memory	Data record review mode)
Day average	7,14,21,28,60,90 Days	Not provided
Size	89.6(L) x53.8 (W) x16.1 (H)mm	98.5(L) x 58(W) x 15.5(H)mm
Weight	40.6g (Without Battery)	51.4 g (Without Battery)
Data Transmission	No	CDMA module(disabled)
Capable		CDWW Module(disabled)

# 6. Test Principle:

The detection and measurement of glucose in blood is by an electrochemical biosensor technology using glucose dehydrogenase.

### 7. Performance Characteristics:

Genesis Health Technologies Blood Glucose Monitoring System has the same performance characteristics as the predicate device.

A comparison of system accuracy performance demonstrated that the Genesis Health Technologies Blood Glucose Monitoring System and the U-RIGHT TD-4252 Blood Glucose Monitoring System are substantially equivalent.

Software verification and validation testing confirmed that the performance, safety and effectiveness of the Genesis Health Technologies Blood Glucose Monitoring System are equivalent to the predicate device.

The cleaning and disinfection protocol employed by the two systems is validated for the effectiveness of disinfecting HBV, and are robust to cleaning and disinfection procedures after multiple cleaning and disinfection cycles.

# 8. Conclusion:

Based on the information provided in this submission, the Genesis Health Technologies Blood Glucose Monitoring System is substantially equivalent to the predicate U-RIGHT TD-4252 Blood Glucose Monitoring System.



10903 New Hampshire Avenue Silver Spring, MD 20993

TaiDoc Technology Corporation c/o Linda Ko 3F, 5F, No. 127, Wugong 2<sup>nd</sup> Rd. Wugu District New Taipei City CHINA (TAIWAN) 24888

SEP 19 2012

Re:

k121224

Trade Name: Genesis Health Technologies Blood Glucose Monitoring System,

Model TD-4123

Regulation Number: 21 CFR §862.1345 Regulation Name: Glucose Test System

Regulatory Class: Class II

Product Codes: NBW, LFR, JJX

Dated: August 14, 2012 Received: August 23, 2012

### Dear Ms Ko:

We have reviewed your Section 510(k) premarket notification of intent to market the device referenced above and have determined the device is substantially equivalent (for the indications for use stated in the enclosure) to legally marketed predicate devices marketed in interstate commerce prior to May 28, 1976, the enactment date of the Medical Device Amendments, or to devices that have been reclassified in accordance with the provisions of the Federal Food, Drug, and Cosmetic Act (Act) that do not require approval of a premarket approval application (PMA). You may, therefore, market the device, subject to the general controls provisions of the Act. The general controls provisions of the Act include requirements for annual registration, listing of devices, good manufacturing practice, labeling, and prohibitions against misbranding and adulteration.

If your device is classified (see above) into either class II (Special Controls) or class III (PMA), it may be subject to such additional controls. Existing major regulations affecting your device can be found in Title 21, Code of Federal Regulations (CFR), Parts 800 to 895. In addition, FDA may publish further announcements concerning your device in the Federal Register.

Please be advised that FDA's issuance of a substantial equivalence determination does not mean that FDA has made a determination that your device complies with other requirements of the Act or any Federal statutes and regulations administered by other Federal agencies. You must comply with all the Act's requirements, including, but not limited to: registration and listing (21 CFR Part 807); labeling (21 CFR Parts 801 and 809); medical device reporting (reporting of medical device-related adverse events) (21 CFR 803); and good manufacturing practice requirements as set forth in the quality systems (QS) regulation (21 CFR Part 820).

If you desire specific advice for your device on our labeling regulation (21 CFR Part 801), please contact the Office of In Vitro Diagnostic Device Evaluation and Safety at (301) 796-5450. Also, please note the regulation entitled, "Misbranding by reference to premarket notification" (21 CFR Part 807.97). For questions regarding postmarket surveillance, please contact CDRH's Office of Surveillance and Biometric's (OSB's) Division of Postmarket Surveillance at (301) 796-5760. For questions regarding the reporting of adverse events under the MDR regulation (21 CFR Part 803), please go to <a href="http://www.fda.gov/Medical-Devices/Safety/ReportaProblem/default.htm">http://www.fda.gov/Medical-Devices/Safety/ReportaProblem/default.htm</a> for the CDRH's Office of Surveillance and Biometrics/Division of Postmarket Surveillance...

You may obtain other general information on your responsibilities under the Act from the Division of Small Manufacturers, International and Consumer Assistance at its toll-free number (800) 638-2041 or (301) 796-5680 or at its Internet address <a href="http://www.fda.gov/MedicalDevices/ResourcesforYou/Industry/default.htm">http://www.fda.gov/MedicalDevices/ResourcesforYou/Industry/default.htm</a>

Sincerely yours,

Couriney H. Lias, Ph.D.

Director

Division of Chemistry and Toxicology Devices

Office of In Vitro Diagnostic Device

**Evaluation and Safety** 

Center for Devices and Radiological Health

**Enclosure** 

# **Indications for Use**

510(k) Number: K121224

Device Name: Genesis Health Technologies Blood Glucose Monitoring System, model

TD-4123

Indications for Use:

The Genesis Health Blood Glucose Monitoring System is intended for use in the quantitative measurement of glucose in fresh capillary whole blood from the finger and the following alternative sites: the palm, the forearm, and the upper-arm. It is intended for use by people with diabetes mellitus at home as an aid in monitoring the effectiveness of diabetes control program. It is not intended for the diagnosis of or screening for diabetes mellitus, and is not intended for use on neonates.

This system is intended to be used by a single person and should not be shared.

The Genesis Health Technologies test strips are for use with the Genesis Health Technologies meter to quantitatively measure glucose (sugar) in fresh capillary whole blood samples drawn from fingertips, palm, forearm and upper arm.

The alternative site testing in the Genesis Health Blood Glucose Monitoring System can be used only during steady-state blood glucose conditions.

The Genesis Health Technologies control solutions are for use with the Genesis Health Blood Glucose meter and test strips to check that the meter and test strips are working together properly and that the test is performing correctly.

Prescription Use	And/Or	Over the Counter Use X.			
(21 CFR Part 801 Subpart D)		(21 CFR Part 801 Subpart C)			
(PLEASE DO NOT WRITE BELOW THIS LINE; CONTINUE ON ANOTHER PAGE IF NEEDED)					
	9/17/2017	gnostic Device Evaluation and Safety (OIVD)			
Evaluation and Safety					
510(k) 417127 L		Page 1 of 1			